

Winter Storm Severity Index – Alaska Fairbanks

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Focus Group Agenda

Introduction to the Project and Introduction of all Participants

Pre-session survey

Scenario

Post-session survey



West Coast Winter Storm T-3 Wednesday



National Weather Service Fairbanks, AK



@NWSFairbanks

Intro, discussion of event, briefing format, take questions at the end

AKZ222-250200-/O.NEW.PAFG.WS.A.0030.211225T1800Z-211227T0600Z/

Middle Tanana Valley-

Including Fairbanks, Fort Wainwright, Eielson AFB, Ester, North Pole, Moose Creek, Two Rivers, Fox, Chatanika, Chena Hot Springs, and Sourdough Camp

547 AM AKST Wed Jan 22

...WINTER STORM WATCH IN EFFECT FROM SATURDAY MORNING THROUGH- SUNDAY EVENING...

* WHAT...Heavy snow and freezing rain expected. Travel will be very difficult to impossible. Total snow accumulations of 8 to 12 inches, with localized amounts up to 18 inches, and ice accumulations of a light glaze are possible.

* WHERE...Middle Tanana Valley.

* WHEN...From Saturday morning through Sunday evening.

* ADDITIONAL DETAILS...Significant reductions in visibility are possible.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Winter Storm Watch means there is potential for significant snow, sleet or ice accumulations that may impact travel.

Continue to monitor the latest forecasts.

OK - how are you feeling about your risk based on this watch? Do you use winter storm watches in your decision-making? How? Do you share watches, and if so, with whom?



West Coast Winter Storm T-2 Thursday



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Intro, discussion of event, briefing format, take questions at the end

Special Weather Statement

National Weather Service Fairbanks AK 155 PM AKST Thu Jan 23

...Major Winter Storm Late This Weekend...

A strong weather front is expected to push east across northern Alaska over the weekend, with significant winter storm impacts beginning on Sunday and lasting into early next week for the Interior.

An initial front will bring light snow across the Interior on Saturday, with 1 to 2 inches of accumulations through Saturday night. Heavy snow will then push in from the west beginning on Sunday morning and last through Sunday night before dissipating.

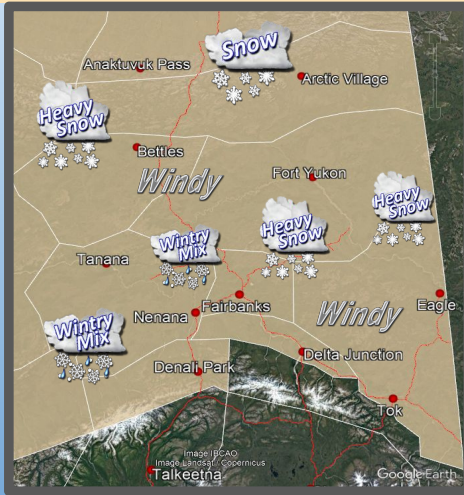
Snow accumulations exceeding one foot for the Fairbanks area is not out of the question at this point. Additionally, there is a chance that snow will transition to rain as far east as Fairbanks Sunday night into Monday, but confidence remains low of this possibility at this time. Expect strong west winds to develop Sunday afternoon, resulting in significant blowing and drifting snow across the Interior going into Monday.

Residents should take proper precautions to ensure safety in preparation for any holiday travel over the weekend. Stay tuned to www.weather.gov/fairbanks as we continue to monitor changes to the outlook throughout the weekend.

What about Special Weather Statements - do you use these? How does this change your sense of your risk? Are you taking any actions right now?



Special Weather Statement



National Weather Service Fairbanks, AK



@NWSFairbanks

Is this graphic helpful? Have you seen something like this before? How would you use this graphic?



Central And Eastern Interior Winter Storm

When	<ul style="list-style-type: none"> ● <u>Early Sunday AM through Late Monday PM</u> 																											
What	<ul style="list-style-type: none"> ● Areas of Strong, Gusty Winds Possible ● Mixed Precipitation Possible South of Fort Yukon to Tanana ● Blowing Snow at Higher Elevations ● Heavy Snow, up to 12" possible in Fairbanks 																											
Impacts	<ul style="list-style-type: none"> ● Reduced Visibility to less than a mile from Blowing Snow and Falling Snow ● Power Outages ● Hazardous Travel and Road Conditions 																											
Confidence	<table style="width: 100%; text-align: center;"> <tr> <td colspan="3"><u>Gusty Winds</u></td> </tr> <tr> <td>Low</td> <td style="background-color: #ffc107;">Moderate</td> <td style="background-color: #dc3545;">High</td> </tr> <tr> <td></td> <td colspan="2">▲</td> </tr> <tr> <td colspan="3"><u>Location Of Mixed Precipitation</u></td> </tr> <tr> <td>Low</td> <td style="background-color: #ffc107;">Moderate</td> <td style="background-color: #dc3545;">High</td> </tr> <tr> <td>▲</td> <td colspan="2"></td> </tr> <tr> <td colspan="3"><u>Heavy Snow</u></td> </tr> <tr> <td>Low</td> <td style="background-color: #ffc107;">Moderate</td> <td style="background-color: #dc3545;">High</td> </tr> <tr> <td></td> <td colspan="2">▲</td> </tr> </table>	<u>Gusty Winds</u>			Low	Moderate	High		▲		<u>Location Of Mixed Precipitation</u>			Low	Moderate	High	▲			<u>Heavy Snow</u>			Low	Moderate	High		▲	
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Have you seen this kind of information/graphic before? What are you thinking about your situation after seeing this graphic? What decisions, if any, are you making at this point? What about the confidence information - how do you use that information? Does that change how you understand your situation? Look at the impacts: are these the impacts you are concerned about? What else might you be concerned about? How helpful is confidence information as presented?

A wind chill advisory is in effect for the Kuskokwim Delta and for Bristol Bay, north of King Salmon through Saturday afternoon. Expect 15 to 25 mph sustained winds. The strongest winds will occur Friday night, with gusts to 30 mph. Very cold wind chills are expected across the Kuskokwim Delta and Bristol Bay through the weekend.

A wind chill advisory means that cold air and wind will combine to create dangerously low wind chills. Frostbite and hypothermia can occur if precautions are not taken. Use caution while traveling outside. Wear appropriate clothing, a hat, and gloves.

For the latest forecast, please visit www.weather.gov/afc



Event Timeline

Created: 1/23 3:00PM AKST

Saturday Night:

- Snow begins Saturday morning and continues through evening.

Sunday evening:

- Rain and freezing rain chances increase for areas from Fairbanks and southwest.
- Winds increase for areas south of Bettles, Fortymile Country, and higher elevations with gusts up to 55 mph.
- Blowing and drifting snow with reduced visibilities.

6 AM Sun

6PM Sun

6 AM Mon

Sunday Morning:

- Snow intensifies early morning areas from Fairbanks to northeast.
- Snow accumulation from Saturday through Sunday morning 3 to 8", with higher amounts along Parks Highway near Nenana.
- Reduced visibilities in snow and blowing snow.
- Rain and freezing rain chances increase from Anderson to Healy along the Parks Highway mid morning Sunday.

Monday:

- Snow total accumulations of 8 to 12" from Bettles to Delta Junction with 4-8" north of Fort Yukon and south of Eagle.



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How important is this kind of timing information? Is this format helpful? What else would you be looking for?



Contact Information



If you have any questions or want more details on this storm please contact the National Weather Service one of the following ways:

Call us at 907-458-3708 (24/7)

Email us at fairbanks.weather@noaa.gov

Facebook: www.facebook.com/NWSFairbanks/

Twitter at @NWSFairbanks

More details at weather.gov/Fairbanks



National Weather Service Fairbanks, AK



@NWSFairbanks

Do you contact your local office? Under what circumstances? Would you be reaching out to them now? Do you follow NWS social media?

Stay tuned for more updates, and if you have any questions please contact us in any of the following ways.



Winter Storm Update T-1 Friday

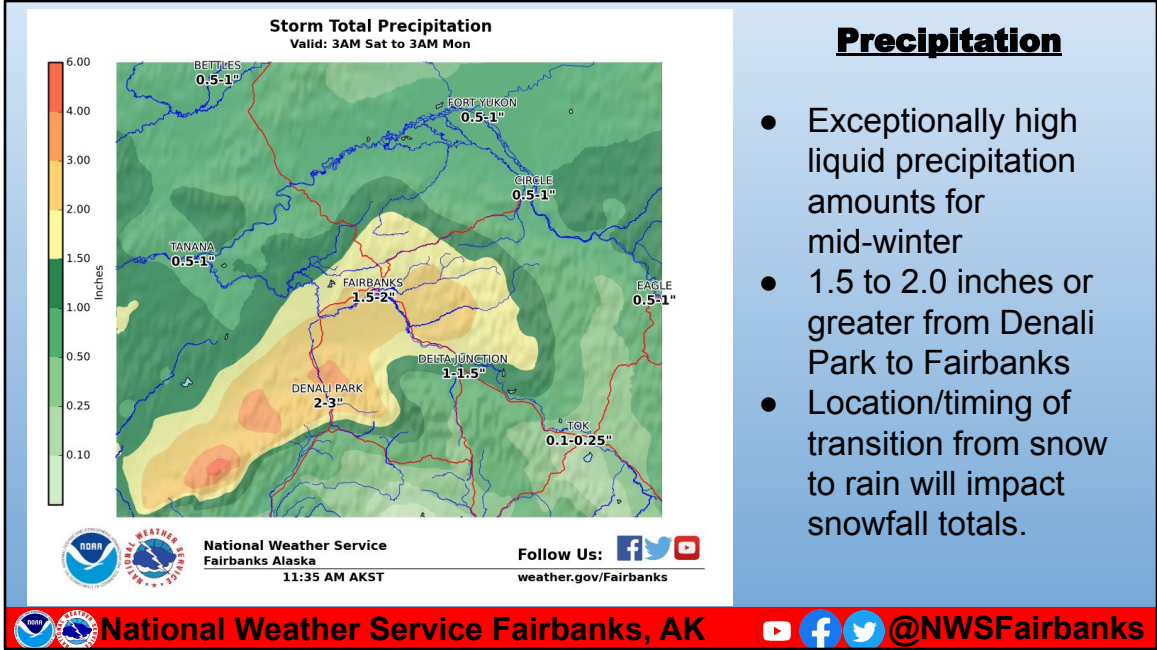


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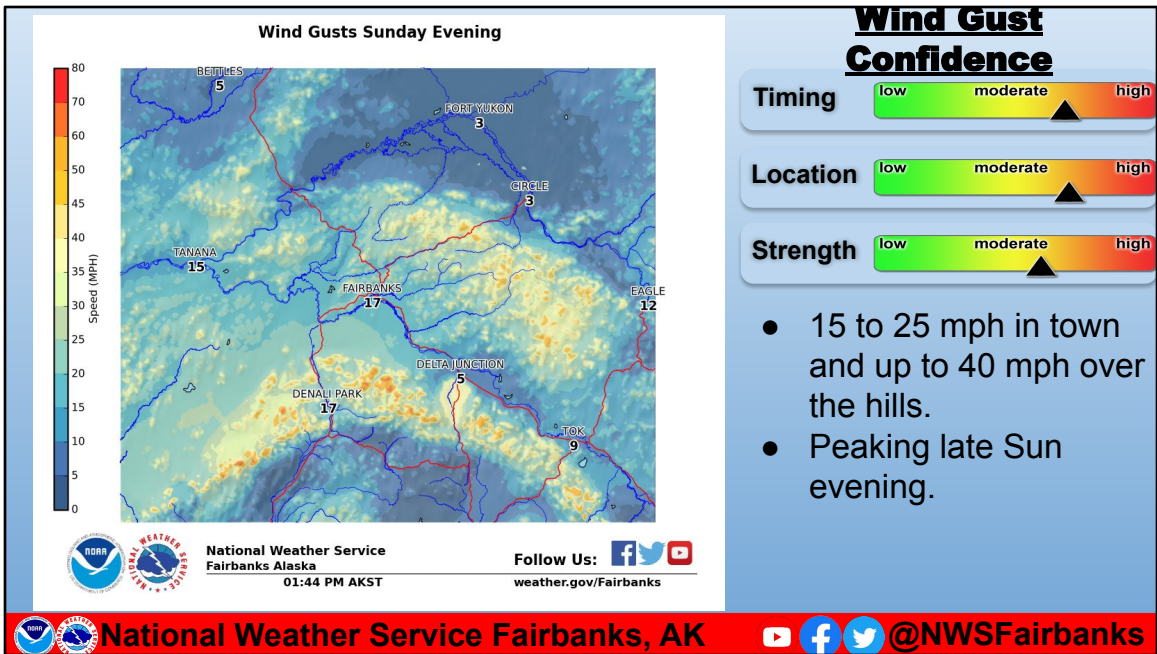
Intro, discussion of event, briefing format, take questions at the end



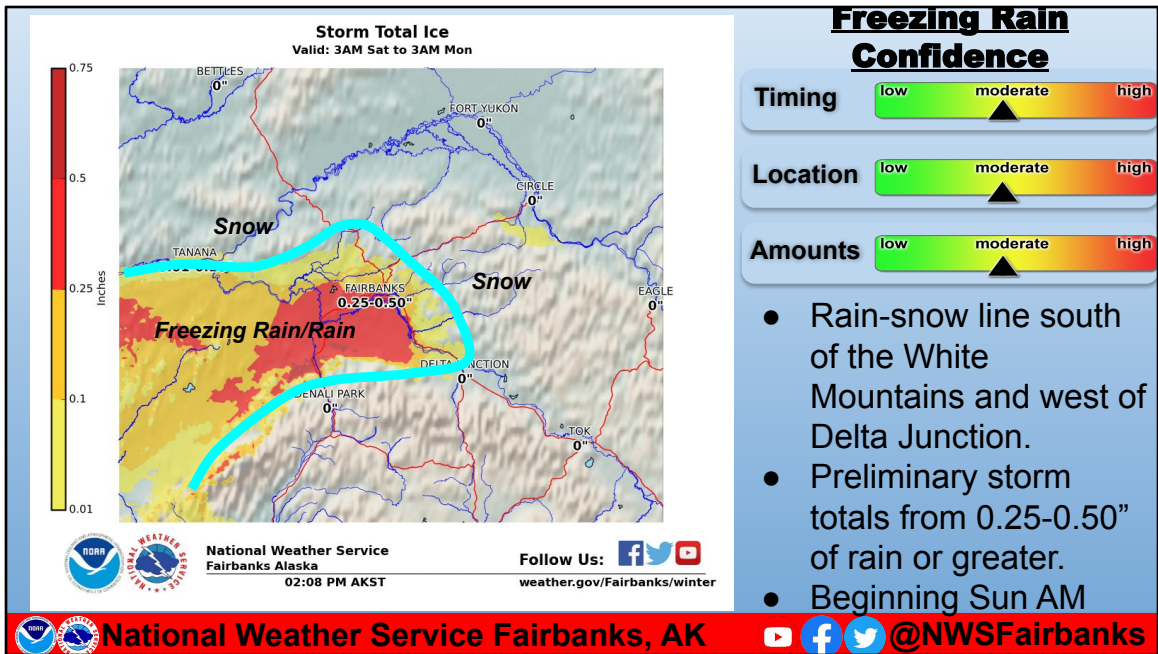
Precipitation

- Exceptionally high liquid precipitation amounts for mid-winter
- 1.5 to 2.0 inches or greater from Denali Park to Fairbanks
- Location/timing of transition from snow to rain will impact snowfall totals.

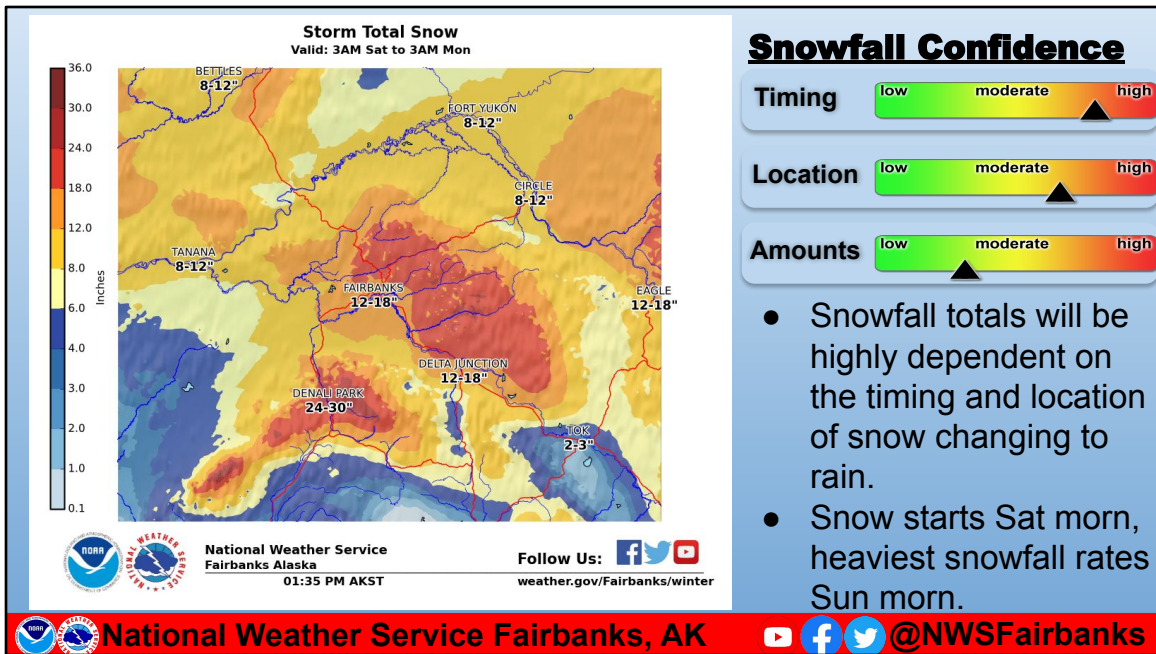
Is this a product you use? What does this tell you? Are you using this information in your decision-making?



How important is this information in your decision-making? Are you seeking out wind information? How does the confidence scale affect your decision-making?



How about ice - how important are ice totals?



And snow - is this helpful?



Fairbanks Event Timeline



Created: 1/24 2:00PM AKST

Sat/Sat Night:

- Snow begins Sat morning and continues through Sat night.
- Snow accumulations 8-12 inches - highest in the hills.
- Higher amounts near Denali.

Sunday Afternoon/Evening:

- Rain and freezing rain likely with significant accumulations, transitioning back to snow after midnight.
- Westerly winds increasing gusting 20-40 mph, strongest over the hills.
- Blowing and drifting snow with reduced visibilities.

6AM SAT

6AM SUN

2PM SUN

10PM SUN

6AM MON

Sunday Morning:

- Snow intensifies early Sun morning, rates greater than 1"/hour
- Rain and freezing rain likely from Nenana to Healy early Sun morning and in Fairbanks by late Sun morning.
- Rain-snow line still uncertain BUT likely south of the White Mtns and west of Delta Junction.

Monday:

- Lingered snow showers and diminishing winds.
- Snow total accumulations of 12-18 inches, highest over hills north and east of Fairbanks.



National Weather Service Fairbanks, AK



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Again, timing information. What are you doing right now? Are you sharing this information with anyone? How and with whom?



Winter Storm Warning



Created: 1/24 2:00PM AKST

What:

- Heavy snow and low visibility
- Rain and freezing rain
- Areas of strong, gusty winds
- Blowing snow, especially over highway summits

Where:

- Denali to Fairbanks and the hills north and east.

When:

- Early Sat morning to Mon morning.

Impacts:

- Hazardous travel conditions
- Potential downed trees due to snow/ice laden branches
- Possible power outages



National Weather Service Fairbanks, AK

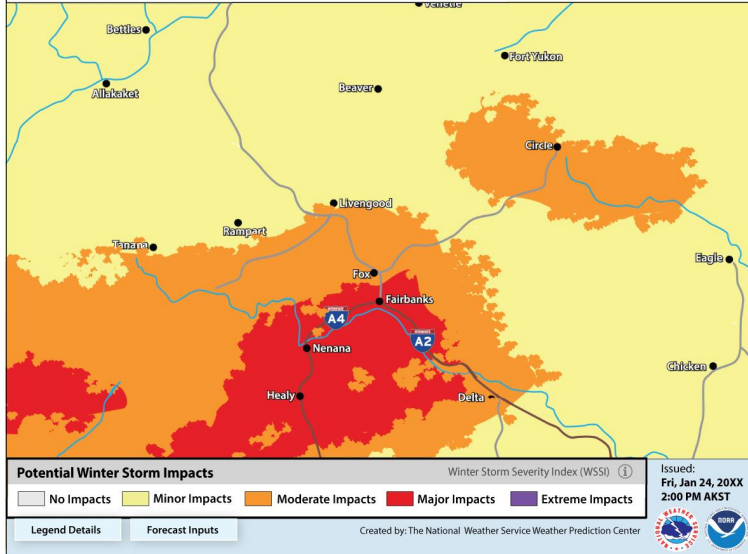
What about storm warnings? How does this change your thinking? Do warnings trigger any actions or decisions?

This is one way of presenting impacts - let's look another.

Overall Winter Storm Impacts

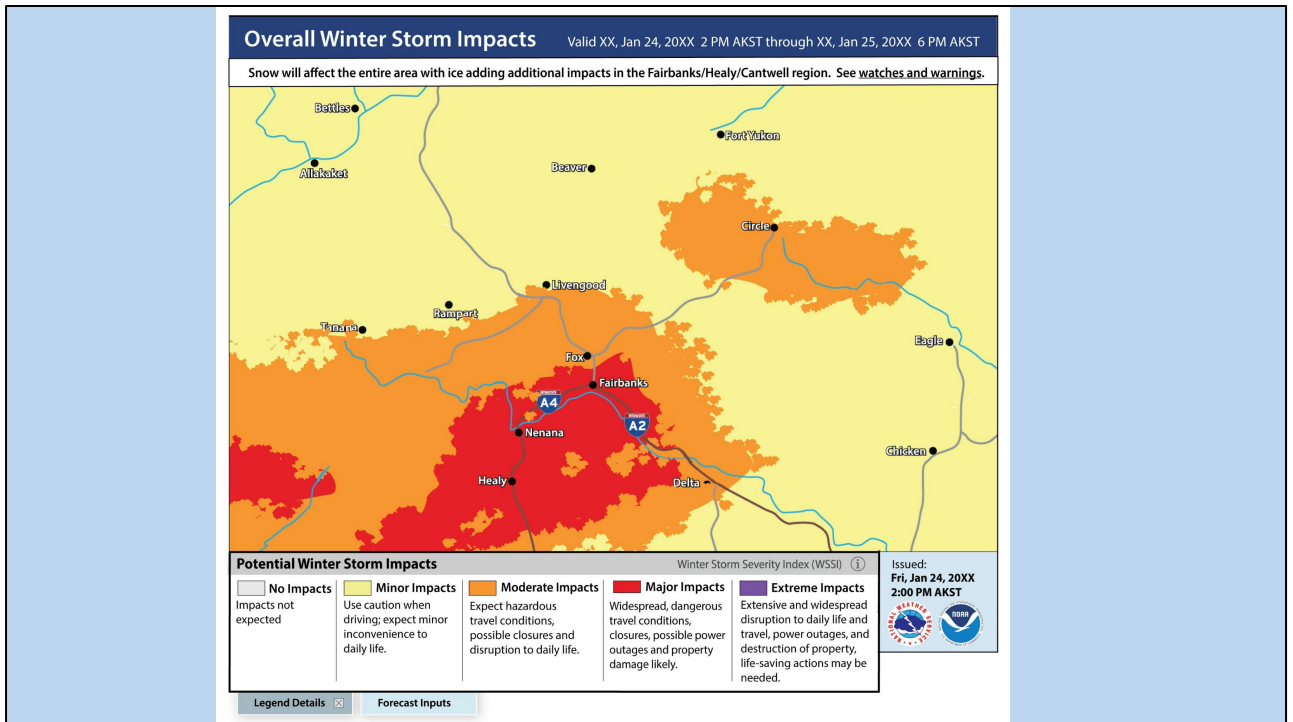
Valid XX, Jan 24, 20XX 2 PM AKST through XX, Jan 25, 20XX 6 PM AKST

Snow will affect the entire area with ice adding additional impacts in the Fairbanks/Healy/Cantwell region. See watches and warnings.

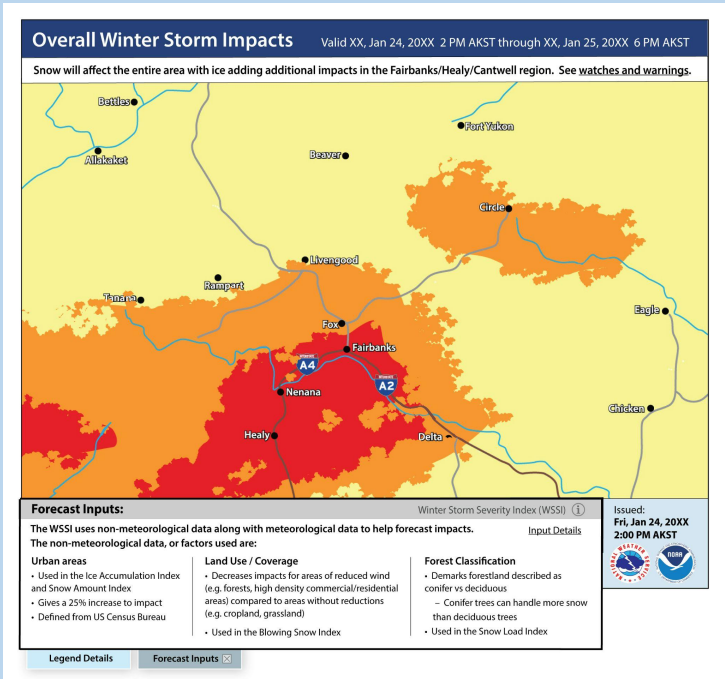


What is this product telling you? How do you interpret the impact levels? What else do you want to know based on this graphic?

Is information like this on impacts helpful or important to you?



This version shows a more complete legend description. How do these impact definitions meet your decision-making needs? Is this product possibly useful to you? How? What else would it need to be useful? Would you share this product with others, and if so, with whom?



Let's study this legend a little more closely. This legend tells you some of the background factors that are used to determine the impact levels (that is, what is considered extreme or major or moderate and why). Is this information helpful to you? What else would you be looking for when using this product? Which impacts are you most concerned about when looking at this product?

Mention forecaster's note and ask if that is helpful. What types of information would you like to see in this element?



Contact Information



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Twitter at @NWSFairbanks

More details at weather.gov/Fairbanks



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Now are you contacting anyone?

Stay tuned for more updates, and if you have any questions please contact us in any of the following ways.



Interior Winter Storm Update T Saturday



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Intro, discussion of event, briefing format, take questions at the end

AKZ222-251500- /O.UPG.PAFG.WS.A.0030.211225T1800Z-211227T0600Z/

/O.EXB.PAFG.WS.W.0028.211225T1800Z-211227T0600Z/

Middle Tanana Valley-Including Fairbanks, Fort Wainwright, Eielson AFB, Ester, North Pole, Moose Creek, Two Rivers, Fox, Chatanika, Chena Hot Springs, and Sourdough Camp

312 AM AKST Sat Jan 25

...WINTER STORM WARNING IN EFFECT FROM 9 AM SATURDAY TO 9 PM AKST SUNDAY...

* WHAT...Heavy snow and freezing rain expected. Plan on difficult travel conditions. Total snow accumulations of 10 to 15 inches, with localized amounts up to 20 inches, and ice accumulations between one quarter and one half inch are expected.

* WHERE...Middle Tanana Valley.

* WHEN...9 AM Saturday to 9 PM Sunday.

* ADDITIONAL DETAILS...Winds gusting as high as 35 mph will cause areas of blowing and drifting snow will develop Sunday night.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

A Winter Storm Warning means significant amounts of snow, sleet and ice are expected. This will make travel very difficult or impossible. The latest road conditions can be obtained by calling 5 1 1.



Winter Storm Warning



What	<ul style="list-style-type: none">• Heavy snow and low visibility• Freezing rain and rain• Areas of strong, gusty winds• Blowing snow, especially over highway summits
Where	<ul style="list-style-type: none">• Denali to Livengood and Delta west (including Fairbanks)
When	<ul style="list-style-type: none">• Snow through early Sun morning, heaviest early Sun.• Freezing rain Sun morning into Sun night
Impacts	<ul style="list-style-type: none">• Hazardous travel conditions• Potential for downed trees/power lines due to snow/ice accumulation and gusty winds• Possible power outages
 National Weather Service Fairbanks, AK	

Feel free to change banner colors to if necessary.



Changes Since Jan 24th Briefing



- Area of freezing rain/rain expanded north and eastward (now includes Livengood, Delta Junction, and possibly Central/Circle)
- Freezing rainfall totals have increased due to snowfall changing to freezing rain sooner and slightly more precipitation expected
- Snowfall amounts diminished several inches due to snow changing to freezing rain
- Winds will peak Late Sun night rather than in the evening.



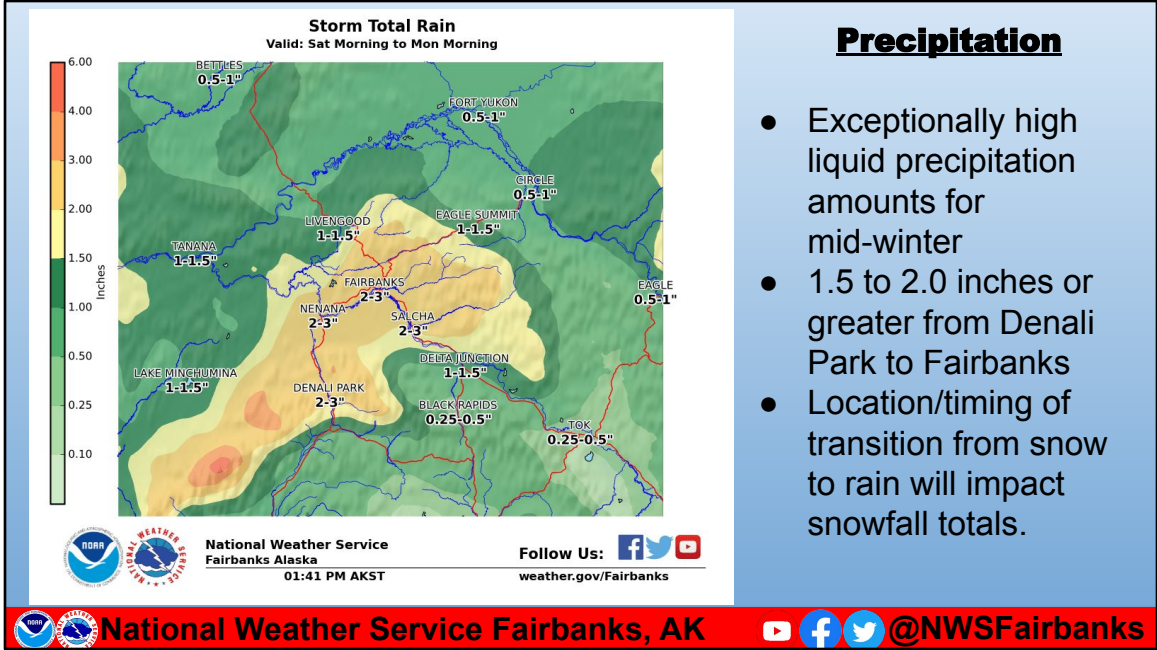
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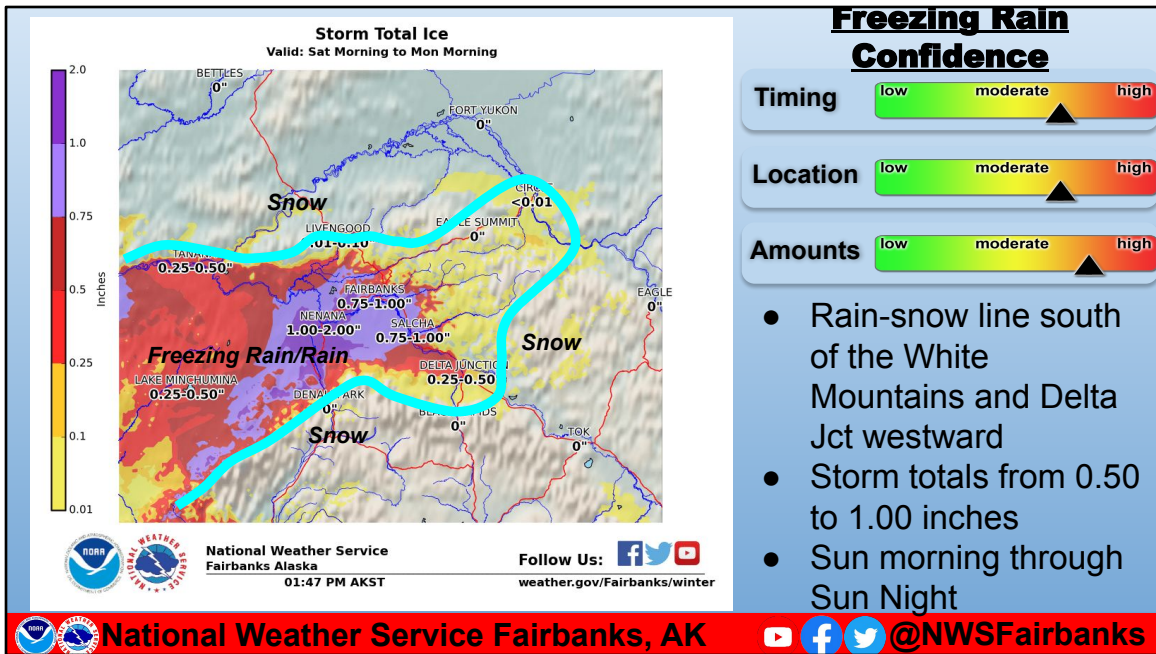
@NWSFairbanks

How helpful is this slide?

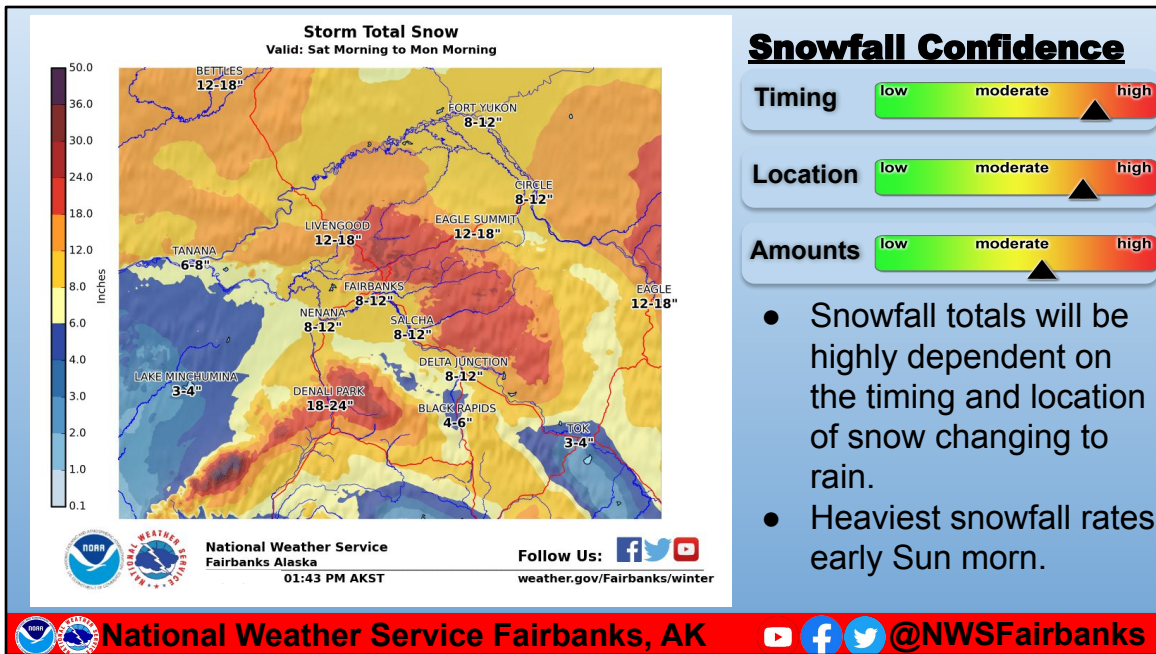
Stay tuned for more updates, and if you have any questions please contact us in any of the following ways.



How does this rain forecast affect your thinking?



What about ice?

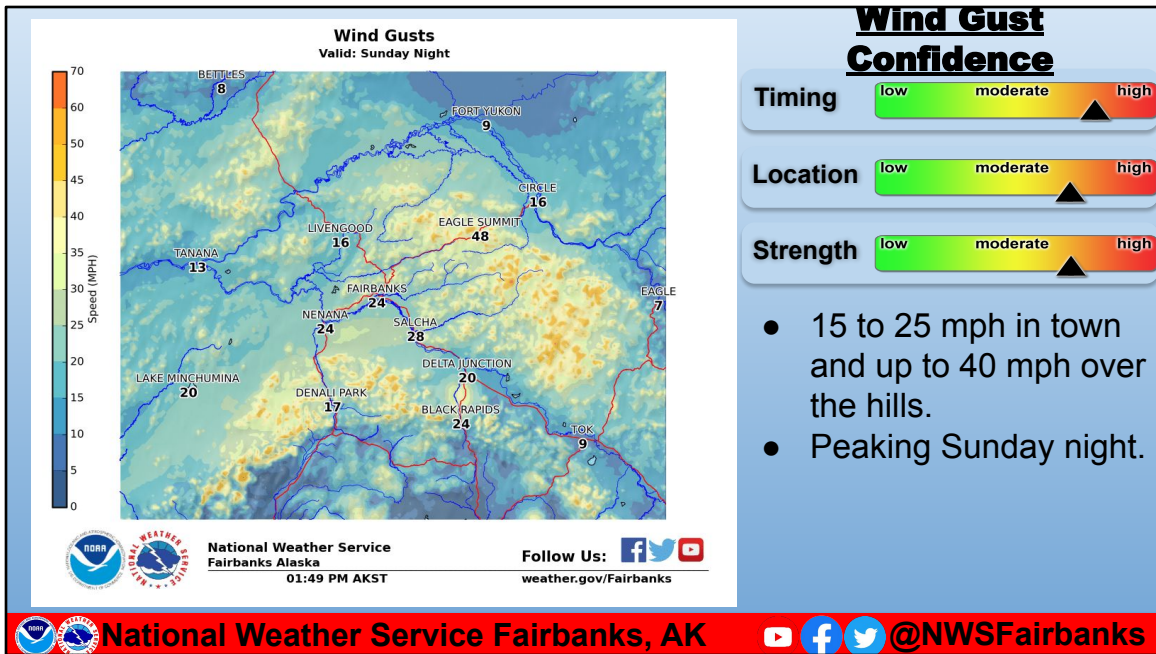


Snowfall Confidence



- Snowfall totals will be highly dependent on the timing and location of snow changing to rain.
- Heaviest snowfall rates early Sun morn.

And snow?



And wind - of all of these, which are most critical? Is there anything else you would be looking for?



Fairbanks Event Timeline



Created: 1/25 2:30PM AKST

Sat Night:

- Snow begins Sat morning and continues through Sat night.
- Snow accumulations 8-12 inches - highest in the hills.
- Higher amounts near Denali.

Sunday Afternoon/Night:

- Rain and freezing rain likely with significant accumulations, transitioning back to snow after midnight.
- Westerly winds increasing gusting 20-40 mph, strongest over the hills.
- Blowing and drifting snow with reduced visibilities.

6AM SAT

6AM SUN

2PM SUN

10PM SUN

6AM MON

Sunday Morning:

- Snow intensifies early Sun morning, rates greater than 1"/hour
- Rain and freezing rain likely from Nenana to Healy early Sun morning and in Fairbanks by mid morning.
- Rain-snow line still uncertain BUT likely south of the White Mtns and west of Delta Junction.

Monday:

- Lingered snow showers and diminishing winds.
- Snow total accumulations of 8-15 inches, highest over hills north and east of Fairbanks.



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Stay tuned for more updates, and if you have any questions please contact us in any of the following ways.

WSSI Website

Have you visited this site before?

Explain the features/give tour of the site. Note that this is for CONUS only but that there will be one for Alaska in the future.

What features of the website are most useful to you?

Is there anything that is missing? What additional functionality would be helpful?

Is there anything that is confusing?

How would you use the information/products on this site? When would you use it (i.e. how many days before storm)?

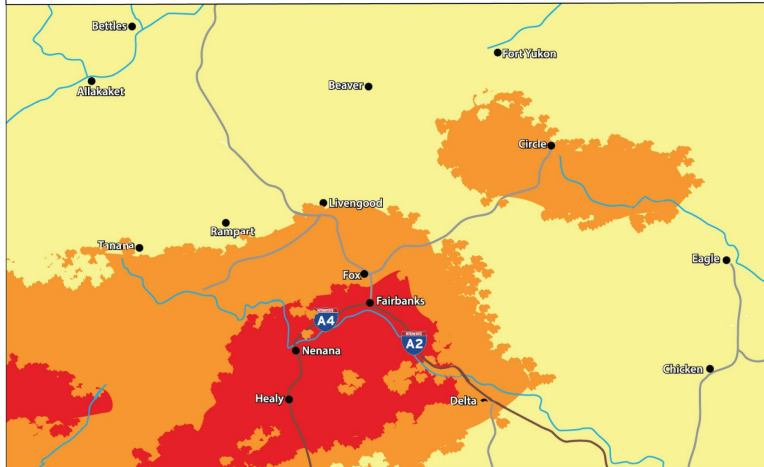
Ask about rolling window - is this useful? Would you use this and if so, how?

Do you prefer static images to the interactive website?

Overall Winter Storm Impacts

Valid XX, Jan 24, 20XX 2 PM AKST through XX, Jan 25, 20XX 6 PM AKST

Snow will affect the entire area with ice adding additional impacts in the Fairbanks/Healy/Cantwell region. See watches and warnings.



Potential Winter Storm Impacts

Winter Storm Severity Index (WSSI) ⓘ

No Impacts Impacts not expected	Minor Impacts Use caution when driving; expect minor inconvenience to daily life.	Moderate Impacts Expect hazardous travel conditions, possible closures and disruption to daily life.	Major Impacts Widespread, dangerous travel conditions, closures, possible power outages and property damage likely.	Extreme Impacts Extensive and widespread disruption to daily life and travel, power outages, and destruction of property, life-saving actions may be needed.
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Issued:
Fri, Jan 24, 20XX
2:00 PM AKST

Legend Details x

Forecast Inputs

Anything else you would add? Look at forecasters' note and legend again. Leading components/impacts that need to be included in a useful product.